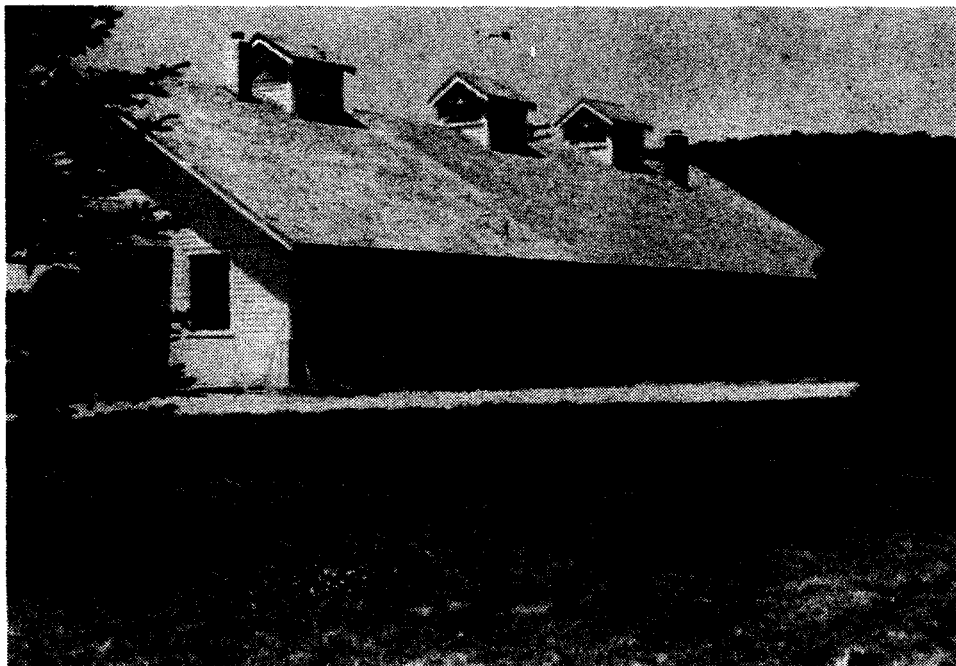




GRACE HATCHERY  
ANNUAL REPORT

October 1, 1984 to September 30, 1985



by

Bruce C. Thompson  
Hatchery Superintendent II

October 1987

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## **ABSTRACT**

During the 1985 fisheries year, we received a total of 2,743,901 eyed eggs from various private and government sources. The species raised at Grace Hatchery were rainbow trout, brown trout, Henrys Lake cutthroat hybrid trout, Bear Lake cutthroat trout, and lake trout. From these eggs, 2,402,225 fish and 129,089 pounds were reared and stocked in Idaho waters.

Some 160,740 pounds of fish feed were used during the year. The total feed conversion for all fish raised (including those still on-station) was 1.1:1. This works out to a production cost of 25 cents per pound for fish feed.

The trap on Bear Lake's St. Charles Creek was in operation during this period. We trapped 228 spawners, which were taken to a Utah Division of Wildlife facility and spawned. We later received 141,190 eyed Bear Lake cutthroat eggs from those brood fish.

The hatchery experienced a complete turnover in personnel due to promotions, retirements, and lateral transfers.

Author:

Bruce C. Thompson  
Hatchery Superintendent II

## INTRODUCTION

Grace Hatchery was constructed in 1946 and is located in southeast Idaho in Caribou Co•nty eight miles south of the small town of Grace, Idaho. The hatchery water supply consists of several springs that form the small creek kn wn as Whiskey Creek. Water temperature remains constant at 52°F year-round. Water flows vary from year-to-year, depending on snowpack and irrigation demands by local farmers. Low flows of 9 cfs to high flows of over 20 cfs have been recorded. Water quality is excellent for the culture of coldwater fish.

The egg incubation room, 16 hatchery vats, a small shop, a feed storage room, and a storage room are all housed in a single wooden building. There are eight nursery raceways, four measuring 60 ft x 7 ft, and four measuring 60 ft x 3 ft. There are four small production raceways, each 100 ft x 4 ft; and 6 large production raceways, each measuring 300 ft x 14 ft.

Buildings on the property include: housing for three permanent employees, one two-car and one four-car garage, public restrooms, an office and an apartment to house temporary employees.

## OBJECTIVES

1. To rear 120,000 pounds of salmonids, mostly rainbow trout, for stocking various waters in the state of Idaho. Streams, rivers, lakes, and reservoirs of Franklin, Bear Lake, Caribou, Oneida, and Bingham counties make up the primary stocking areas of this hatchery.
2. To operate a fish trap on St. Charles Creek, a tributary to Bear Lake. Adult Bear Lake cutthroat are collected in May and transported to the state of Utah's Swan Creek holding pens for spawning. Utah Department of Natural Resources spawns these fish and returns them to the lake. The eggs obtained are water-hardened and taken to Utah's Mantua Hatchery to be reared and stocked back into Bear Lake as fingerlings. This is a joint effort with Utah to enhance and ensure the future of this fish in Bear Lake.
3. To rear other species of fish for state waters as requested and assigned.

## RECOMMENDATIONS

Major improvements necessary at this hatchery are:

1. Replace or repair the domestic water line, which leaks badly.
2. Rebuild the large production raceways. The walls are deteriorating rapidly because the roadbed is higher than the raceway walls. This is a great safety hazard to the visiting public, as someone could very easily fall in and seriously injure themselves.
3. Dredge the settling pond to remove excess solids.
4. Blacktop the hatchery road from the cattleguard to the hatchery grounds to facilitate snow removal and improve winter access.
5. There is a need for a two-car garage for Residence 3.

## FISH PRODUCTION

Eggs received and hatched at Grace Hatchery this year are as follows:

<u>Species</u>	<u>Number of eggs</u>
Rainbow trout (R1)	1,349,313
Brown trout (BN)	473,136
Henrys Lake hybrid cutthroat (RC)	430,258
Bear Lake cutthroat (C5)	141,190
Lake trout	<u>350,004</u>
Total	2,743,901

Fish species stocked and/or transferred according to size are:

<u>Species</u>	<u>Size</u>	<u>Number</u>	<u>Pounds</u>
Rainbow (R1)	0-3 inches	619,662	1,788
	3-6 inches	115,075	1,905
	6 inches +	320,468	102,313
Brown (BN)	3-6 inches	342,355	4,275
Henrys Lake hybrid (RC)	0-3 inches	45,356	280
	3-6 inches	266,583	1,608
Bear Lake cutthroat (C5)	3-6 inches	256,805	15,352
Lake trout	3-6 inches	<u>140,996</u>	<u>1,568</u>
Totals		2,402,225	129,089

Pounds of fish feed consumed are as follows:

<u>Swim-up</u>	<u>No. 1</u>	<u>No. 2</u>	<u>No. 3</u>	<u>No. 4</u>	<u>No. 5</u>	<u>Bulk 1/8 &amp; 5/32</u>
500 lb	1,000	4,300	9,350	8,650	4,350	34,350 98,240 lb

Total = 160,740 lb feed fed out.

Total cost of feed was \$32,061.33. Final feed conversion was 1.103. This year, it cost 25 cents to produce one pound of fish when costs were calculated for fish food only.

#### **FISH HEALTH**

There were no unusual disease problems encountered in 1984 to 1985. Bacterial gill disease and coldwater disease were the only pathogens. Overall, fish were in excellent health.

#### **St. Charles Creek Trapping**

The trap was operated from April 30 to June 18 this year. Stan Bercovitz was the Bio-Aide assigned to the trap. The project is a cooperative effort with the Utah Division of Wildlife Resources.

We operate a trap near the mouth of St. Charles Creek on Bear Lake to capture returning adult Bear Lake cutthroat. These fish are transported to Utah's Swan Creek holding pens, and subsequently sorted and spawned by Utah fisheries personnel. The eggs are incubated at Utah hatcheries. We received 200,000 to 300,000 eyed eggs for our programs--including the Little Blackfoot River morpholine imprinting project--and for subsequent fingerling releases back into Bear Lake. There were 228 fish trapped this year, and 28 of those were immediately released upstream to spawn naturally.

#### **Hatchery Improvements**

The two-car garage behind the hatchery building was damaged by snow. The engineering crew repaired and rewired it. New living room carpeting was installed in all three residences. The old carpet was laid in the bedrooms of residences 2 and 3. Residence 1 received new carpeting for one bedroom, and new linoleum was installed in the kitchen, utility room, and half bath. The hatchery received a new Mitsubishi riding lawn mower, and various small hand and power tools were purchased.

### **Public Relations**

From discussions with the hatchery personnel, I estimated that approximately 1,000 people visited Grace Hatchery this year. Next year, this will probably increase as new and bigger hatchery signs have been installed at the highway turnoff entrance.

### **Miscellaneous**

Again, there was a complete turnover in personnel during this fisheries year. Ed Schriever was promoted to Superintendent I at Oxbow Hatchery. Rob Hill was hired and took his place in late December. Ted Packard retired in the spring of 1985. He was replaced by Mike Stoddard in August. Mike Stoddard was promoted from Fish Culturist at Niagara Springs Hatchery. Tom Frew transferred laterally to McCall Hatchery shortly thereafter, and Bruce Thompson was promoted from Clark Fork Hatchery to become Superintendent II in December.

### **ACKNOWLEDGMENTS**

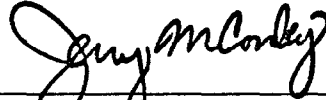
Hatchery staff consisted of: Tom Frew, Hatchery Superintendent II; Donald "Ted" Packard, Hatchery Superintendent I; Mike Stoddard, Fish Hatchery Superintendent I; Ed Schriever, Fish Culturist; Rob Hill, Fish Culturist; Stan Bercovitz, Bio-Aide; and Tony Beckstead, JTPA Laborer.

Submitted by:

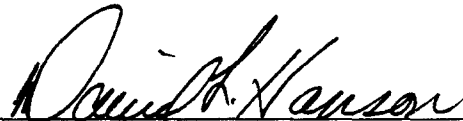
Bruce C. Thompson  
Hatchery Superintendent II

Approved by:

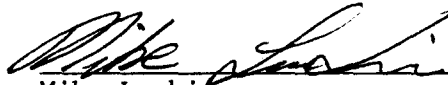
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